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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,168	10/10/2003	Shimson Gottesfeld	21535-007 CON	2312

7590 09/26/2007  
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GLOVSKY AND POPEO, P.C.  
The Chrysler Center  
666 Third Avenue  
New York, NY 10017

EXAMINER
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DOVE, TRACY MAE

ART UNIT	PAPER NUMBER
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1745

MAIL DATE	DELIVERY MODE
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09/26/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/684,168	<b>Applicant(s)</b> GOTTESFELD, SHIMSON	
	<b>Examiner</b> Tracy Dove	<b>Art Unit</b> 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4-6 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-6, 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office Action is in response to the communication filed on 7/20/07. Applicant's arguments have been considered, but are not persuasive. Claims 4-6 and 10 are pending. This Action is FINAL, as necessitated by amendment.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 6 recites the mixing chamber is in the fuel cell, which is not supported by the specification as filed. The terms "fuel cell" and "fuel cell system" are not synonymous and cannot be used interchangeably. At least Figure 2, shows the mixing chamber 12, while part of the fuel cell system 2, is not contained in the fuel cell housing 4.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 4 recites “delivering fuel from a fuel chamber to a fuel cell” and then recites “driving fuel contained in the fuel chamber to the destination area”, which appears to improperly broaden the claim. The claim states the fuel is delivered from the fuel chamber to the fuel cell. Thus, the destination area must be within the fuel cell. The claim should be amended accordingly. See also claim 6. In claim 6 it is unclear how the fuel is delivered to a mixing chamber if claim 1 requires the fuel from the fuel chamber to be delivered to the fuel cell.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 4, 5 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Yonetsu et al., US 6,506,513.

Yonetsu teaches a fuel cell system comprising a fuel cell body including a unit cell having an electromotive section and a liquid fuel tank for storing a liquid fuel that is to be supplied to the fuel cell body. The liquid fuel tank is provided with a pressure adjusting mechanism for introducing a required amount of the liquid fuel from a liquid outlet port of the tank into the unit fuel cell (abstract). The mechanism prevents a negative pressure by positively introducing a gas component generated in the fuel cell into the liquid fuel tank (6:17-40). A tube capable of introducing the gas generated on the side of the fuel cell body was arranged within the liquid fuel tank. One end of the tube was open within the liquid fuel tank and the other end is

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open to provide a space for collecting the carbon dioxide gas generated on the side of the anode of the fuel cell body. A pressure control valve was mounted to the tube so as to make it possible to release the pressure through the valve over a predetermined level of pressure (16:25-35).

Thus the claims are anticipated.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yonetsu et al., US 6,506,513.

Yonetsu teaches a fuel cell system comprising a fuel cell body including a unit cell having an electromotive section and a liquid fuel tank for storing a liquid fuel that is to be supplied to the fuel cell body. The liquid fuel tank is provided with a pressure adjusting mechanism for introducing a required amount of the liquid fuel from a liquid outlet port of the tank into the unit fuel cell (abstract). The mechanism prevents a negative pressure by positively introducing a gas component generated in the fuel cell into the liquid fuel tank (6:17-40). A tube capable of introducing the gas generated on the side of the fuel cell body was arranged within the liquid fuel tank. One end of the tube was open within the liquid fuel tank and the other end is open to provide a space for collecting the carbon dioxide gas generated on the side of the anode of the fuel cell body. A pressure control valve was mounted to the tube so as to make it possible to release the pressure through the valve over a predetermined level of pressure (16:25-35).

Yonetsu does not explicitly state the fuel is supplied to a mixing chamber. However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one of skill would have known the pressure adjusting mechanism could have been used to deliver fuel from the fuel tank to any other chamber having a lower pressure than that of the fuel tank. Supplying the fuel to a mixing chamber is obvious in view of the teaching by Yonetsu that the pressure adjusting mechanism can be used to supply fuel from the fuel tank to the anode of a fuel cell.

#### ***Response to Arguments***

Applicant's arguments filed 7/20/07 have been fully considered but they are not persuasive.

Applicant asserts Yonetsu does not teach, suggest or disclose subject matter relating to driving fluids between chambers of a fuel cell with gaseous effluent from an anode chamber. However, the claims are not directed to driving fluids between chambers of a fuel cell. Claim 4 is directed toward driving fuel contained in a fuel chamber (outside of fuel cell, but part of the fuel cell system) to a destination area (not required to be a chamber of a fuel cell). Thus, applicant's arguments are not commensurate in scope with at least claim 4. Claim 10 is directed toward driving fuel contained in a fuel chamber (outside of fuel cell, but part of the fuel cell system) to a fuel cell. Thus, applicant's arguments are not commensurate in scope with at least claim 10. Yonetsu teaches a fuel cell system comprising a fuel cell body including a unit cell having an electromotive section and a liquid fuel tank for storing a liquid fuel that is to be supplied to the fuel cell body. The liquid fuel tank is provided with a pressure adjusting mechanism for introducing a required amount of the liquid fuel from a liquid outlet port of the

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tank into the unit fuel cell (abstract) (driving fuel contained in the fuel chamber to the fuel cell).

The mechanism prevents a negative pressure by positively introducing a gas component generated in the fuel cell into the liquid fuel tank (6:17-40). A tube capable of introducing the gas generated on the side of the fuel cell body was arranged within the liquid fuel tank. One end of the tube was open within the liquid fuel tank and the other end is open to provide a space for collecting the carbon dioxide gas generated on the side of the anode of the fuel cell body (gaseous product from an anode chamber of a fuel cell system to be introduced to the fuel chamber). A pressure control valve was mounted to the tube so as to make it possible to release the pressure through the valve over a predetermined level of pressure (16:25-35).

Regarding claim 6, Yonetsu does not explicitly state the fuel is supplied to a mixing chamber. However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one of skill would have known the pressure adjusting mechanism could have been used to deliver fuel from the fuel tank to any other chamber having a lower pressure than that of the fuel tank. Supplying the fuel to a mixing chamber is obvious in view of the teaching by Yonetsu that the pressure adjusting mechanism can be used to supply fuel from the fuel tank to the anode of a fuel cell. Applicant has not addressed the Examiner's motivation statement.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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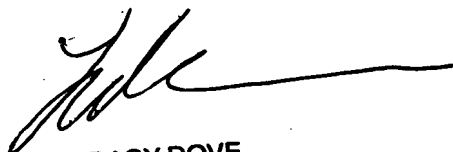
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is 571-272-1285. The examiner can normally be reached on Monday-Thursday (9:00-7:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 24, 2007



TRACY DOVE  
PRIMARY EXAMINER